To the extent that the Federal Communications Commission ("FCC" or "Commission") concludes that the relevant provisions of the Act apply (a matter on which we express no position), the Department submits that the proposed Minnesota arrangement is consistent not only with the above provisions of the Act, but also with applicable provisions related to the federal-aid highway program.

Public Safety and Right-of-Way Management

Through the FHWA, the Department has for decades funded the construction, maintenance, and improvement of the nation's interstate highway system, as well as other roadways. Federal law specifically requires FHWA approval of state management of the rights-of-way along these roads, which may be given only when access "will not impair the full use and safety of the highway, ... or otherwise interfere in any way with the free flow of traffic[.]" 23 U.S.C. § 111(a); also 23 U.S.C. § 109(l). FHWA has promulgated regulations providing guidance on this subject. 23 C.F.R. § 1.23 and Part 645.

These regulations govern access to freeway rights-of-way by "utilities" (broadly defined to include electric power companies, cable television operators, telecommunications providers, petroleum pipelines, police/fire signal systems, etc.). 23 C.F.R. § 645.105. Until 1988, FHWA policy strictly restricted access even by such entities in the interests of "full control of access:"

Access control has been recognized as one of the most significant design factors contributing to safety of a freeway system and is considered an essential element in preserving the traffic carrying capacity of these important highways. Because control of access can be materially affected by the extent and manner in which nonhighway type facilities are permitted to use freeway right-of-way, these nonhighway uses, including longitudinal utility use, are allowed only in special circumstances.

50 Fed. Reg. 20351 at 20352 (May 15, 1985).

Those circumstances basically centered on whether denial of access and use would result in "undue or exceptional hardship" to consumers of the services of these utilities. Id.

Consistent with an increased sensitivity to the interests of states, in 1988 FHWA revised its regulations on utility accommodation. 53 Fed. Reg. 2829 (February 2, 1988). ¹ The new policy, which is still in place, allows states far greater flexibility to manage rights-of-way. FHWA approval of state plans remains a requirement, but

Executive Order 12,612, entitled *Federalism*, was issued in 1987 and emphasized that "with respect to national policies administered by the States, the national government should grant the States the maximum administrative discretion possible. Intrusive, Federal oversight of State administration is neither necessary nor desirable." 52 Fed. Reg. 41685 (October 30,1987).

there are few substantive restrictions so long as safety, efficiency, and maintenance are not adversely affected and there is no conflict with other law. 23 C.F.R. § 645.205. In order to obtain approval of its utility accommodation plan, a state must ascertain the effects utility installations will have on highway and traffic safety, evaluate the effects the denial of a particular application would have on the productivity of agricultural land, and consider any impairment or interference with the use of the highway. 23 C.F.R. § 645.209(c)(2); also see 23 U.S.C. § 109(l). FHWA also recommends that states limit the number or type of utilities that qualify for longitudinal access if excessive utility installations are likely to result in conditions detrimental to the highway and its use. 53 Fed. Reg. at 2832. Indeed, the revised regulations permit a state to continue to preclude access to its rights-of-way as long as such a policy is expressed in its utility accommodation plan. 53 Fed. Reg. at 2831; see also 23 C.F.R. § 645.209(c)(3).

The revised regulations thus declare that, subject to FHWA standards and procedures, it is a state's responsibility to determine whether a particular request to use the right-of-way is appropriate. Although utilities urged FHWA to limit compensation to states for use of the rights-of-way to administrative costs, the final rule left such decisions to the discretion of the states. 53 Fed. Reg. at 2831.

The Intelligent Transportation Systems Program

In 1991, Congress passed the Intelligent Transportation Systems Act, mandating that the Department establish a program to research, develop, and operationally test ITS technologies and promote such systems as a component of the nation's surface transportation systems. Pub. L. No. 102-240, 105 Stat. 2189 (as amended by Pub. L. No. 104-59, 109 Stat. 568, 603; codified at 23 U.S.C. § 307 Note). The goal of ITS is to apply advanced technologies and services in the areas of communications, navigation, and information systems in order to enhance travel and safety on the nation's surface transportation system. ITS technologies existing today include regionwide integrated transportation management, traveler information systems, emergency management services, and electronic toll collection. ² Current legislative efforts to reauthorize the ITS program (part of the surface transportation financial assistance program) include deployment and integration of ITS systems as national goals. See H.R. 2400, 105th Cong., 2d Sess. § 656 (1998) and S.1173, 105th Cong., 1st Sess. § 2103 (1998).

The National ITS Program is dependent upon both wireline and wireless telecommunications networks. State and local governments as well as the private sector will be the primary implementers of ITS technologies. The 1988 revised FHWA regulations on utility accommodation set the stage for state and local governments to consider mechanisms for obtaining required telecommunications infrastructure, and, in certain instances, generating additional revenues or benefits

The Department has appeared previously before the Commission to explain and advance the ITS program. *E.g.*, Docket RM 9096 and WT Docket No. 96-86, FCC 96-155.

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through partnering or contracting with the private sector. Because of the critical importance of wireline communications to ITS implementation, and because of its desire to acquaint public agencies with the issues, feasibility, and opportunities associated with shared resource projects, FHWA provided funding for a study to examine institutional and non-technical issues associated with such projects.³ As defined in the study, shared resource projects generally include four features: public/private partnering, private longitudinal access to public rights-of-way, installation of telecommunications hardware, and compensation granted to the right-of-way owner over and above state administrative costs.⁴

The Department's policy encouraging shared resource projects also reflects proposed Congressional reauthorization for the ITS program including provisions encouraging innovative and nontraditional methods of procurement for ITS, minimizing the relative percentage of Federal ontributions or ITS, and encouraging innovative use of private resources (such as through public-private partnerships). See generally H.R. 2400, 105th Cong., 2d Sess. §§ 653, 656 (1998) and S.1173, 105th Cong., 1st Sess. § 2102 (1998).

Discussion

The Minnesota Department of Transportation requests a declaratory ruling that the State's proposal to grant one "wholesale" carrier of fiber optic cable exclusive access to state freeway rights-of-way, subject to the wholesaler's obligation to make capacity available to all telecommunications service providers on a competitively neutral and non-discriminatory basis, is consistent with section 253 of the Telecommunications Act of 1996.

Section 253(a) of the Act contains a general prohibition against any state or local government from implementing any statute or regulation which precludes any entity from providing interstate or intrastate telecommunications service. As a general matter, the Commission has previously held that this provision "is the only portion of section 253 that broadly limits the ability of States to regulate" and that all remaining sections carve out defined areas in which states "may regulate or continue to regulate, subject to certain conditions." Public Utility Commission of Texas, CCB Pol 96-13, et al., FCC 97-346 at ¶ 44 (rel. October 1, 1997) ("PUC of Texas").

United States Department of Transportation, Shared Resources: Sharing Right-of-Way for Telecommunications, Identification, Review, and Legal Analysis of Legal and Institutional Issues (1996) ("Shared Resource Study"). A copy of this report is included in the record of this proceeding as Exhibit 2 to the Opposition of the Minnesota Telephone Association. However, the copy in the record was obtained from an electronic database, and neither the quality of the printout nor the pagination is the same as in the hard copy of the Study. More importantly, the version now in the record does not contain the original footnotes, at least one of which is important to this proceeding. Enclosed herewith is a hard copy of that section of the Study relevant to the Minnesota petition. It is to this document that DOT will refer in these reply comments.

⁴ <u>Id.</u> at 2.

Subsection 253(b) reserves to states the ability to impose, on a "competitively neutral" basis, requirements "necessary," *inter alia*, to "protect the public safety and welfare." Subsection 253(c) also preserves the authority of state and local government "to manage the public rights-of-way or to require fair and reasonable compensation from telecommunications providers, on a competitively neutral and nondiscriminatory basis, for use of public rights-of-way on a nondiscriminatory basis[.]" 47 U.S.C. §§ 253(b),(c). It is the application of the latter two provisions to the Minnesota proposal, and comments made thereon, that the Department addresses herein.

1. Section 253(b)'s reservation to states of the authority to impose on telecommunications service providers requirements "necessary to ... protect the public safety and welfare" cannot be read literally so as to limit states only to providing some absolute minimum level of protection.

A number of parties contend that Minnesota cannot satisfy section 253(b) because exclusive physical access to public rights-of-way is not truly necessary to protect the public safety and welfare. See Comments of the National Cable Television Association at 12-13; Comments of Ameritech Corporation at 4; Opposition of the Minnesota Telephone Association at 44. Such arguments, in the view of DOT, distort the meaning of this provision and are also at odds with applicable federal transportation law.

The Commission has properly refused to adopt a literal interpretation of the term "necessary" found in section 253(b). PUC of Texas at ¶ 45. Particularly when the subject is public safety, DOT believes that any requirements imposed by a state ought not be limited to the absolute least restrictive means for purposes of this provision. Any other reading would require that the FCC become the arbiter of what constitutes an irreducible minimum (or literally "necessary") level of public safety in any number of contexts, a function that is beyond the expertise and jurisdiction of the agency. Thus it is clear that in their assessment of the public safety, states need not adopt only the absolute least restrictive requirements in order to pass muster under section 253(b).

Although the Commission has determined to interpret the term "necessary" according to the facts presented in individual cases, <u>Id</u>., it is clear that what is "necessary" encompasses more than what is simply "reasonable" or "helpful." New England Public Communications Council, CCB Pol 96-11, FCC 96-470 (rel. December 10, 1996) at ¶¶ 21, 25. Minnesota has correctly pointed out that limited access to public rights-of-way is more than just helpful or useful: it remains a matter of longstanding public policy that access to rights-of-way not compromise safety or interfere with traffic. Minnesota Petition, General Statement of Facts, at 1-2; 23

U.S.C. §§ 109(l), 111; 23 C.F.R. § 645.205. ⁵ The Department agrees.

It bears repeating that access control has long been recognized as one of the most significant design factors contributing to safety of a freeway system and is an essential element in preserving the traffic-carrying capacity of highways. 50 Fed. Reg. at 2353. Relatively more frequent access by multiple parties would likely pose a greater risk to these basic interests than more limited access. States may propose utility accommodation plans for public rights-of-way that provide for more rather than less access, but the paramount concern must in every event remain transportation safety and efficiency. We suggest that this is entirely consistent with section 253(b)'s concern for restrictions in the interest of the public safety and welfare. Consequently, the Department believes that Minnesota's agreement to accommodate limited access to its rights-of-way protects the public safety in a manner consistent with both federal-aid highway law and with section 253(b) of the Telecommunications Act of 1996.

2. The Minnesota agreement is a legitimate exercise of its authority to manage public rights-of-way.

Section 253(c), as noted, preserves the authority of state and local governments to manage public rights-of-way, and confirms their ability "to require fair and reasonable compensation from telecommunications providers, on a competitively neutral and nondiscriminatory basis, for use of public rights-of-way." 47 U.S.C. § 253(c). Some commenters argue that Minnesota's agreement does not constitute "bona fide" right-of-way management or proper exercise of a state's authority over rights-of-way. See, e.g. Opposition of Minnesota Telephone Association, at 52, ¶ 2; Comments of Association for Local Telecommunications Services, at 3, ¶ 1. DOT considers these assertions unfounded.

The Commission has specifically acknowledged that the legislative history of section 253(c) specifically permits restrictions on, *inter alia*, "the time or location of excavation to preserve effective traffic flow, prevent hazardous conditions, or minimize notice impacts." Classic Telephone, Inc., CCB Pol 96-10, FCC 96-397 (rel. October 1, 1996) at ¶ 39. That is clearly the traditional legal and policy basis for right-of-way management. Pages *supra*. As noted above, once the FHWA approves a utility accommodation plan according to similar criteria, a state has broad discretion in determining the particular use to which rights-of-way may be put. <u>Id</u>.

The Minnesota agreement is a reasonable exercise of its management authority over public rights-of-way. In its petition, Minnesota noted that until the award of the

DOT's copy of the Minnesota petition was obtained on-line, and therefore its pagination is very likely different from the hard copy filed with the Commission. To avoid confusion, therefore, we have referenced the document by its structural sections.

agreement at issue, it had elected (with one minor exception) to prohibit longitudinal access to such rights-of-way. See Minnesota Petition, Argument, Section III.C. Such a policy is wholly within the bounds of appropriate state right-of-way management. Minnesota has now permitted limited access to public rights-of-way in a fashion that allows the State to maintain a level of control in the interests of public safety and transportation efficiency. The Department believes that this, too, is a sound approach and wholly consistent with section 253(c), as well as federal transportation law.

3. Minnesota's grant of exclusive physical access to certain public rights-of-way meets the requirement of the Act that state-imposed conditions be "competitively neutral."

There is one other issue that the Department wishes to address, pursuant to its responsibility over the National ITS Program. Section 253 mandates that restrictions that are otherwise permissible under powers reserved to states must also be "competitively neutral." 47 U.S.C. § 253(b),(c). A number of parties have asserted that Minnesota's proposal is not "competitively neutral" because it substantially benefits one entity to the detriment of other telecommunications service providers who may desire to install, operate and/or maintain infrastructure of their own choosing. See, for example, Comments of the Minnesota Telephone Association, at 4, ¶ 1; Comments of the National Cable Telephone Association, at 5, ¶ 1. The Department urges the Commission to reject these arguments.

The Shared Resources Study funded by FHWA addressed this very issue. It acknowledged that the Act's provisions could raise competitive concerns depending on the different means by which states might attempt to implement ITS projects, including specifically grants of exclusive physical access to public rights-of-way. Shared Resources Study at 55-58. The Study's starting point on this matter emphasized the central thrust of relevant portions of the Act: "Certainly, telecommunications providers will not be able to exercise a monopoly in any physical facility." <u>Id</u>. at 55 note 54. (Indeed, competition serves as an underlying principle for Departmental awards of financial assistance generally, including those resulting from state procurements for surface transportation projects. See 23 U.S.C. \S 112; 49 C.F.R. \S 18.36(c)(1).) The Study then made two fundamental recommendations by which states might conform to section 253: that states require the private party ultimately obtaining exclusive physical access (1) to be "selected by a competitive, nondiscriminatory process," and (2) to allow other telecommunications providers "to purchase capacity at market rates." <u>Id</u>. Minnesota has followed both.

The commenters virtually ignore the manner in which the Minnesota Department of Transportation developed the arrangement at issue. The State issued a request for proposals ("RFP") seeking, via a full and open competition, a public/private

partnership with infrastructure providers to develop communications primarily within public rights-of-way. ⁶ RFP at 1. The State noted that proposals which included either or both fiber optics and wireless transmissions would be considered. The State also noted its receptivity to diverse communications technology proposals. RFP at 1. The RFP stated that responding parties could offer proposals either independently or as multi-firm joint ventures (with one entity serving as the prime respondent). RFP at 3. Minnesota allowed telecommunications service providers flexibility to propose a range of options to respond to the RFP's requirements. Thus, the procurement process undertaken by Minnesota was "competitively neutral" in that it created a broad opportunity for all potential offerors to advance proposals and granted them maximum flexibility in formulating their proposals.

Moreover, although the Innesota agreement grants physical access to a single entity, it is in no other respect exclusive, particularly insofar as telecommunications services are concerned. It affirmatively promotes competition by requiring the entity granted physical access not only to offer fiber optic capacity to other telecommunications service providers on a nondiscriminatory basis, but also to collocate fiber optic cable of other entities in the rights-of-way. See Minnesota's Petition, Statement of Facts, II.B.2. The Department believes that the full and open competition procedures employed by Minnesota and the conditions imposed on the awardee by the State to make telecommunications capacity available satisfy the competitive neutrality requirements of section 253 of the Act.

Conclusion

Minnesota's petition presents issues that arise from the overlap of federal communications and transportation law. In such circumstances the Department is singularly equipped to offer its expertise in the latter for the Commission's consideration. The FCC should know that as a general matter, federal transportation law grants states significant discretion to manage public rights-of-way, consistent with the interests of safety and efficiency. The FCC should also know that FHWA has reviewed and approved Minnesota's utility accommodation plan according to applicable standards and procedures.

That plan reflects the feature that brings the agreement at issue to the Commission's attention, the installation of telecommunications capacity. That same feature implicates one of the Department's core transportation interests, the National ITS Program. Just as current transportation policy permits states leeway in the management of public rights-of-way, so does ITS policy encourage innovative procurement mechanisms and public-private partnerships to secure the infrastructure and services required for ITS deployment initiatives.

A copy of the RFP is included in the Opposition of the Minnesota Telephone Association as Exhibit 1.

DOT has not conducted an exhaustive review of all aspects of the Minnesota proposal, or of the full array of comments offered by the numerous parties to this proceeding. We have, however, examined the major aspects of Minnesota's proposal in light of the express references to public safety, right-of-way management, and competitive neutrality in sections 253(b) and (c) of the Telecommunications Act. Indeed, similar arrangements are likely to appear in the future, as other states manage public rights-of-way in innovative ways in order to implement the infrastructure required for ITS and so enhance transportation safety and efficiency. The Department submits that Minnesota's actions are fully consistent with those provisions and we urge the Commission to so declare.

Respectfully submitted,

Nancy E. McFadden

Enclosures

ENCLOSURE



Memorandum

Federal Highway **Administration**

Minnesota Petition for Declaratory Ruling Subject Concerning Access to Freeway Rights-of-Way Under Section 253 of the Telecommunications Act

Date

From

Federal Highway Administrator

Reply to Attn of

HCC-32

Ms. Nancy E. McFadden General Counsel (C-1)

As the Administrator of the Federal Highway Administration ("FHWA"), the Agency principally responsible for both the promulgation of regulations providing for management of freeway rightsof-way on the Federal-aid highway system and the implementation of the national Intelligent Transportation Systems ("ITS") program, I am providing this memorandum in support of the Department's comments to the Federal Communications Commission ("FCC" or "Commission"). The Department recommends that the Commission support Minnesota's (also referred to as "State") petition for an FCC ruling that the manner in which the State obtained telecommunications infrastructure complied with the Telecommunications Act of 1996.

Though the Telecommunications Act prohibits state and local governments from implementing any laws, regulations or requirements that preclude telecommunication service providers from providing service, the Act carves out two exceptions to this general prohibition. The first exception allows a state to impose, on a competitively neutral basis, requirements necessary to preserve and advance universal service, protect the public safety and welfare, ensure the continued quality of telecommunications services and safeguard the rights of consumers. The second exception preserves the rights of state and local governments to manage their freeway rights-of-way and to require compensation, in a competitively neutral manner, for the use of the rights-of-way.

Specifically, Minnesota advertised a competitive Request for Proposals for a public-private partnership venture for communications infrastructure providers or operators to exclusively enter, install, and develop communications principally in the State's rights-of-way in exchange for providing operational communications to the State to be used, in part, for ITS needs. In its agreement with the communications infrastructure provider, the State mandated that the provider collocate fiber of other entities in the rights-of-way. The State also mandated that the provider sell or lease its telecommunications facilities on a non-discriminatory basis. The agreement allowing access to one entity, with provisions ensuring that the telecommunications needs of other firms are met, successfully balances the State's need to maintain a level of control over its freeway rights-of-way, critical to preserving the safety and efficiency of the roadway, with the procompetitive requirements of the Telecommunications Act

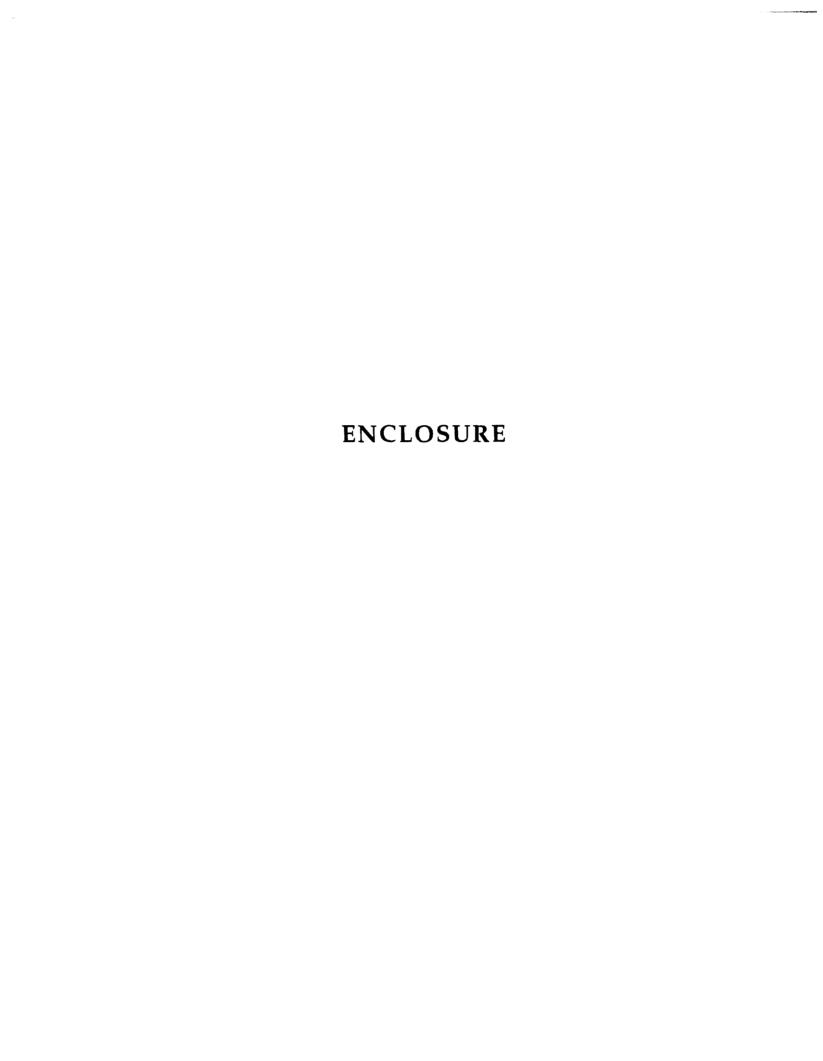
The Minnesota proposal is consistent with the Act's exceptions and furthers important State interests in the safe operation of its highway system. In its petition, Minnesota correctly pointed out that limited access to the rights-of-way is more than just helpful or useful: it is still a matter of public policy that access to rights-of-way not compromise safety or interfere with traffic. 23 U.S.C. § 111(a). Indeed, access control has been recognized as one of the most significant design factors contributing to the safety of a freeway system and is considered an essential element in preserving the traffic carrying capacity of highways. 50 Fed. Reg. at 2,353. Relative frequent access by multiple parties would likely pose a greater threat to these basic interests than mere limited access. Consequently, the FHWA believes that the State's determination that its agreement is the suitable mechanism by which to accommodate access to its rights-of-way while protecting public safety is not only necessary, but a matter of Federal-aid highway law.

The infrastructure reserved by the State under the exclusive agreement also serves as a foundation for the State's ITS telecommunications requirements. The national ITS program is critical component of current and future national surface transportation initiatives. ITS is basically about information - the collection, sharing, processing, and redistribution of information - to help people and goods move better. Consequently, telecommunications - both wireline and wireless - will serve as a critical backbone for ITS deployment. Because of the expense and complexity associated with procuring infrastructure for ITS, the FHWA supports state and local government use of innovative procurement mechanisms and public-private partnerships to obtain the infrastructure and services required for ITS deployment initiatives. The Minnesota petition before the FCC details such an effort

I believe that the Minnesota agreement supports a convergence of goals -- safety and ITS surface transportation goals and the pro-competitive aspects of the Telecommunications Act. Minnesota has been a pioneer in ITS development. If the FCC rules favorably on Minnesota's petition, Minnesota will be able to continue a statewide initiative that contributes directly to a transportation program of national significance. I want to expressly add my support to the Department's comments urging the FCC to do so.

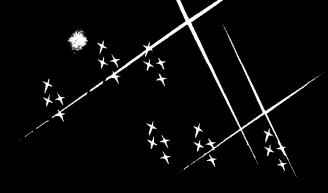
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¹U.S. Department of Transportation, Intelligent Transportation Systems, The National Architecture for ITS: A Framework for Integrated Transportation in the 21st Century (1990), p. 3.





SHARED RESOURCES: SHARING RIGHT-OF-WAY FOR TELECOMMUNICATIONS



Identification, Review and Analysis of Legal and Institutional Issues

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FINAL REPORT

5.0 PROJECT STRUCTURE ISSUES

Shared resource projects can be structured in a number of ways, with variations in responsibilities for installation, ownership, and operation as well as the form of benefits and privileges granted to each partner. The focus group highlighted the structural issue of exclusivity for more detailed research, that is, whether access to highway right-of-way should or could be limited to a single private partner.

5.1 EXCLUSIVITY

In structuring a shared resource project, the question of whether the right to install and operate telecommunications facilities longitudinally in the public right-of-way should be exclusive must be addressed at the outset. For this discussion, "exclusive" means that during the term of the right, the public agency will not grant a right to another telecommunications facility to occupy the same section of the public right-of-way; i.e., only one longitudinal installation of a facility will be allowed in any particular segment of the highway.⁵⁴

Shared resource agreements may (1) limit longitudinal access to public rights-of-way to a single private sector partner (that is, grant exclusivity), (2) require access for all interested firms that meet specified qualifications (e.g., fiber-optics installations), or (3) prescribe a structure between these two ends of the range. Stated more technically, the term "exclusive" means that during the term of the right, the public agency will not grant a right to another telecommunications facility to occupy the same section of the public right-of-way; i.e., only one longitudinal installation of a facility is allowed in any particular segment of the highway.

In making this determination, the public agency must balance certain competing considerations. On one hand, by granting only exclusive rights, the public agency will limit the number of third parties that will have access to the right-of-way at any given time, thereby promoting the agency's objectives in maintaining the safety and integrity of the

It is still unclear to what degree the Telecommunications Act of 1996 will constrain exclusive arrangements in the interests of non-discrimination and barrier-free entry to the ROW for telecommunications. Future regulations and/or legal precedent will determine whether exclusive access and/or exclusive marketing rights but not exclusive use are permissible and, if some types of exclusive arrangements are sanctioned, any conditions applied to that partnership and how the private partner should be selected. Certainly, telecommunications providers will not be able to exercise a monopoly in any physical facility. Public agencies, however, may be allowed to grant exclusive access so long as the private partner (1) is selected by a competitive, nondiscriminatory, process and (2) cannot exercise a monopoly in any physical facility, i.e., must allow other providers to purchase capacity at market rates. Fortunately, in many shared resource arrangements termed "exclusive", the private party is strictly acting to re-market the conduit capacity rather than as a communications provider itself. It is thus by definition making all facilities available to competing providers.

highway. Further, by granting exclusive rights, the public agency may increase the perceived value of the access rights offered to the potential telecommunications partner. Thus both private and public partners to such an agreement benefit from exclusivity.

On the other hand, granting exclusive rights may foster anti-competitive effects. Non-exclusive access may increase the number of service providers in a given area and promote competition among them, thus benefiting the general public through lower prices for services. In fact, even the threat of entry when access is non-exclusive may generate competition-like results. Moreover, the public sector partner (generally the DOT) may benefit from non-exclusivity by receiving compensation from more than one partner, the sum total of in-kind compensation and cash revenue from multiple partners exceeding the amount likely to be forthcoming from a single exclusive partner. ⁵⁵

To address anti-competitive concerns, public agencies might consider requiring that the private party obtaining access to the right—way not discriminate in licensing its rights to third parties. In the Iowa Accommodation Policy, the DOT reserves the right to require that longitudinal utility facilities be installed in a multiduct system to be shared with others, and the department is authorized to designate the first utility facility owner requesting occupancy as the "lead company," responsible for design, construction, maintenance, and financing of the multiduct system. As new occupants are added, they must pay their proportionate share. ⁵⁶ Massachusetts has taken a similar approach. ⁵⁷

The case studies took several approaches to exclusivity. Although Missouri has historically restricted utility access on the freeways to outer roadways or "limited utility corridors" in which access is open to utilities meeting state permit requirements, the state's agreement with DTI grants an exclusive easement for 40 years within highway airspace outside the standard utility corridor. Section 227.240 of the Missouri Code allows utilities in highway rights-of-way so long as they do not interfere with the roadway. The DTI facility was defined by the state as a "state highway facility" so it is permitted under the contract to be located in places other utilities are not located. The easement is exclusive only as to other fiber-optics cable systems or communications systems.

DTI's exclusive access is considered a procurement contract, awarded to a single contractor in a competitive process, rather than a special privilege, which might be subject to legal challenge. Missouri published an RFP for telecommunications infrastructure procurement that specified requirements for a basic statewide fiber-optics system. The winner of the contract, to be compensated with access to highway right-of-way for its own telecommunications system in the same corridors as the state system, would be that bidder offering the most attractive package for transportation telecommunications infrastructure and service over and above the minimum requirements.

⁵⁵Whether compensation under an exclusive arrangement exceeds that under multiple-partner agreements depends on (1) the value of exclusivity and (2) the number of partners and their willingness to pay for non-exclusive access in the given situation.

⁵⁶Iowa Accommodation Policy, §§ 76-115.23 (306A et seq.). ⁵⁷"Wiring Massachusetts."

Although DTI can locate within the standard utility corridor, location in that portion of the right-of-way is not exclusive. The exclusivity provision contains an exception that permits other firm's fiber-optics cables to cross DTI's easement at an approximate right angle, but only upon mutual agreement of the Missouri Highway and Transportation Commission (MHTC) and DTI regarding the location. The agreement expressly states that nothing in the agreement limits MHTC's authority to install its own fiber-optics cable within MHTC air space for highway purposes.⁵⁸

In an interesting approach to exclusivity, the City of Leesburg Telecommunications Service Agreement with ACN requires that if other entities express interest in the City's cables, ACN must coordinate connection and equipment used for those connections. ACN is permitted to bill those other entities for time and materials spent in the evaluation. Further, since the city is sharing revenues from ACN's marketing of the network, it prohibited ACN from competing with the city's cables.

Essentially, there are two levels of private sector exclusivity in Leesburg: (1) the number of private sector partners involved in the shared resource agreement, and (2) the number of telecommunications service providers gaining access to the fiber-optics infrastructure. ACN is granted exclusivity as the marketing partner for city-owned cable built under the ACN-Leesburg contract. Leesburg is free to allow additional vendors to operate within the service area under other agreements with the city. 59 and the "Leesburg" Telecommunications Systems Permit Ordinance" appears to contemplate open access to multiple vendors. 60 Exclusive access to the City-owned telecommunications capacity is not granted to telecommunications service providers. The fact that ACN is marketing infrastructure capacity on behalf of the City (rather than supplying telecommunications services itself) means that access is offered to bypass systems and common carriers, which compete with each other and with providers not using the City's infrastructure.

The Leesburg-ACN agreement has a unique reverse-exclusivity provision. Within the service area, ACN may not offer certain services to any person or entity on cables other than the cables provided by the City unless the City gives its prior written permission.⁶¹

In Maryland, although the rights granted to MCI and TCG are technically non-exclusive, the private partners have "practical exclusivity" because the state does not want to dig into the right-of-way more than once, and therefore will probably allow only one company to put in fiber and oversee maintenance. Additional partners would have been accepted if they had responded to the RFP with an acceptable bid. The window of opportunity was defined by Maryland for both practical and safety reasons. The state does not want to create problems with traffic congestion and accidents from additional construction. In the Baltimore-Washington Corridor, MCI has installed two conduits, one for itself and one for

^{58&}quot;Fiber Optic Cable on Freeways in Missouri," Agreement between MHTC and DTI dated July 29, 1994,

^{§ 5.} Service Agreement," (1/11/93) §§ 5.40,8.

⁶⁰Ordinance No. 93-25.

⁶¹"Telecommunications Service Agreement," supra, § 8.02.

Maryland, with no excess capacity. The state's preferred situation would be for a "bank of conduits" to be laid by MCI as the initial vendor, with excess capacity that the vendor can then sell or lease to future interested vendors at a mutually agreed-upon price. The licensing agreements for the Ohio Turnpike Authority's right-of-way are expressly non-exclusive.

Finally, Caltrans' lease of air space to BART appears to be exclusive for the conduit system. In turn, BART's license to MFS is expressly made non-exclusive; however, as long as the conduit system between two adjacent BART stations has unoccupied capacity and MFS is not in default under the agreement, BART has agreed that it will not grant a license for purposes of installing a communications system between such points. After the system is fully occupied this exception ceases, even if space later becomes vacant; however, BART must thereafter provide a right of first refusal to MFS if BART wants to add conduit capacity. 62

Summary Table of Exclusivity	
CASE STUDY	APPROACH TO EXCLUSIVITY
Missouri	Exclusive easement outside standard utility corridor
City of Leesburg	No exclusivity for private party; city has exclusive right to ACN's services on cables provided by city
Maryland	Technically no exclusivity; practical exclusivity due to closed window of opportunity
Ohio Turnpike	No exclusivity
BART Caltrans MFS	Exclusive lease Non-exclusive license

5.2 OTHER PROJECT STRUCTURE ISSUES

Other issues in structuring shared resource projects relate to the form of the property right to be granted, type of compensation paid to the right-of-way owner, and geographic scope of the project.

5.2.1 Form of Real Property Right

The form of the right to install and operate telecommunications facilities longitudinally in the public right-of-way involves two core issues: (1) what public resource is being shared and (2) how the right of sharing should be offered to the private sector.

The type of public resource to be shared with the private sector is directly affected by the constraints on public sector authority to use right-of-way for telecommunications facilities.

⁶² License Agreement Between San Francisco Bay Area Rapid Transit District and MFS Network Technologies, Inc., dated September 29, 1994, §§ 2.3 and 2.4.

Can the public sector sell a property right which gives access to the right-of-way (i.e., convey a permanent easement), or must it provide access on a lease or license basis for privately owned conduit or cellular towers? Or is it precluded from both, but permitted instead to grant private sector access on a lease or license basis to a publicly owned conduit or tower?

Additional factors may influence the type of public resource, even where the public agency has expansive authority. For example, an agency may prefer to own the conduit, rather than granting an easement in the right-of-way, in order to maintain complete control of maintenance. For several reasons, however, public agencies may prefer to grant a more extensive interest in the right-of-way if allowed by state law. In most shared resource projects, the public agency will prefer to have maintenance of the fiber system remain the responsibility of the private party. The public agency will probably have to bear some of the cost of constructing the conduit if it is to retain ownership. Moreover, leasing conduit space may be construed as a type of ongoing business enterprise which puts the public agency in the position of a regulated public utility—a position most transportation agencies will prefer to avoid.

The related issue of how the right of access should be offered to the private sector is also governed in the first instance by any constraints on the authority of the public agency to use right-of-way for telecommunications. Access to the right-of-way can be granted under a variety of legal forms which vary in permanence and the extent of rights granted to the private party:

- Easement: a property interest in land owned by another. The types of uses allowed vary by state but, traditionally, easements are limited to certain uses including rights-of-way.
- Lease: an agreement that gives rise to the lessor/lessee relationship by granting rights to use property for a specific time period. There are many different forms of lease payment, including fixed-price, percentage, and graduated based on an independent index.
- Franchise: generally, a privilege granted to engage in defined business practices. Typically, a franchise is a business privilege and is not viewed as a real property right although, where land is involved, some states classify franchise as a form of real estate.
- License: the permission to perform an act which, without such permission, would be a trespass or otherwise illegal. This is a type of permit that is granted, for some consideration, to a private party to allow the practice of some business subject to police power regulation.

Generally, an easement gives the private party the most control, while franchises, leases, and licenses grant decreasing levels of private control, although the rights granted can vary

significantly depending on the provisions of a particular agreement. The most basic distinction among the four forms is that easement and lease agreements give rights to the land, while franchise and license arrangements may not.

In general, the four forms have differing implications for business, including some tax consequences. Property rules differ among states, however, and the nature of the property right granted under each form depends greatly on the terms of the grant. In fact, the different ways in which a private party can be granted access to the right-of-way may be less important than the specific terms of the grant—a more favorable lease may be more desirable to a private party than a restricted easement.

Colorado's Concorde procurement (for placement of coin and coinless landline and cellular pay phones⁶³) explicitly conveys only a license, which is a "personal property right to [the] vendor and rests no property interest in the state right-of-way to the vendor."⁶⁴ "illarly, Palo Alto's agreement explicitly states that it provides a license, not a franchise; powate sector telecommunications providers access a publicly owned conduit managed by MFS but do not control the conduits themselves. ⁶⁵ Massachusetts' policy provides for granting a revocable license; the state owns real property improvements and the licensee owns all telecommunications equipment; however, the Missouri agreement grants an easement in the right-of-way to the private partner.

A concomitant issue is that of responsibility for maintenance of the communications infrastructure. A publicly owned system that leases capacity to private sector users will be maintained by the public sector; a privately owned system that leases capacity (but does not relinquish operating control) to the public sector will be maintained by the private owner. A mixed system raises some issues. A private party providing the network segment will probably want to control maintenance of the entire segment, including both its portion of the facility and any facility provided for public agency use, particularly if the two components are not physically distinct. This arrangement could complicate management of the network and isolation of network problems. Although installing the public and private facilities in separately maintainable conduits may reduce this problem, it would cost more.

5.2.2 Type of Consideration

Structuring a shared resource project involves determining the type of consideration that the public sector will receive from its private partner in return for the right to install and

⁶³The agreement with Concorde will permit installation of pay phones at 65 locations across the state on CDOT highway right-of-way at the vendor's expense, and Concorde will provide free 911 and information lines for hospital, hotel, roadside, and other services. The agreement is a 20-year lease. ⁶⁴Draft Contract, Section IV.G.

⁶⁵Unlike many state highway agencies which are just beginning to address shared resources, the Ohio Turnpike Commission has permitted longitudinal access for a number of communications utilities since 1984. The standard agreement form developed by the Commission covers a number of the issues that state highway agencies are now addressing. The standard agreement for access to the Turnpike provides only a non-exclusive license.

operate telecommunication facilities in the public right-of-way. Statutory or regulatory constraints on the public agency's ability to receive cash compensation for access may play a significant role in delineating the form of consideration. The type of arrangement most appropriate or desirable to the telecommunications industry should also be considered.

Shared resource projects to date have focused primarily on bartering right-of-way access for dedicated capacity. For example, Missouri's agreement with DTI gives the state a dedicated fiber bundle, telecommunications equipment, and services, but no financial interest. Maryland negotiated similar in-kind arrangements for its shared resource project (with two partners) on I-95. Massachusetts has asked private industry partners to provide the state with a one-time benefit in the form of dark fiber to enhance the commonwealth's private communications network and IVHS communications backbone.

The advantage of cash compensation is flexibility: It can be applied toward any transportation or public sector need, subject to statutory limitations on earmarking. An important advantage of barter arrangements is the wide spread between cost to lessee and value to lessor of in-kind compensation. That is, the right-of-way owner receives more in value than the lessee pays for the incremental infrastructure, which is not true for cash arrangements, where a dollar is worth a dollar to both parties. In other words, the avoided cost of telecommunications infrastructure desired by the lessor is significantly greater than the actual cost to the lessee of adding fiber-optics capacity in a conduit that the lessee is already installing for its own use, due to economies of scale in construction. In fact, needs-based compensation is often supported with estimates of costs avoided when physical infrastructure is supplied in exchange for right-of-way access; this helps right-of-way lessors affirm that they did indeed receive significant compensation for granting access.

In requesting in-kind services a public agency might find that, unless its documents are drafted broadly, it unnecessarily limits the value that it will receive for its right-of-way to a specific need to be addressed today, instead of harnessing that value to serve future needs. Moreover, the type of consideration required may effectively limit the universe of private entities able to take advantage of public right-of-way. For example, if the public agency specifically requires in-kind ITS services in return for access to the right-of-way, it may effectively weed out telecommunications firms that are not involved in ITS and thereby give firms with both telecommunications and ITS capabilities a perceived or real competitive advantage in the industry.

A more general disadvantage of strict needs-based compensation is the chance of settling for less than the lessee would be willing to pay. Some public agencies have combined cash compensation with needs-based compensation, thus garnering more than they would if they had settled for needs-based compensation alone. When cash compensation is based on a proportion of revenue received by the private partner, the agreement assures the public partner of compensation above in-kind needs yet accommodates any private partner with an aversion to fixed cash commitments unrelated to the venture's success. For example, Caltrans is compensated with a portion of the cash revenues generated by MFS/BART leases as well as with fiber-optics capacity for its own use. On the other hand,

several potential private partners, who participated in a workshop on shared resource projects, indicated that they were averse to revenue sharing with the public sector right-of-way owner unless that agency had shouldered some of the financial risk of the venture (which BART and Leesburg both did).

Another way to extend public sector benefits beyond needs-based compensation is through construction of excess public sector capacity, which the agency can then lease or use for other public agencies or even lease for a fee to private sector users. This option, however, may be precluded by statutory constraints (e.g., constraints on unregulated public utilities) or even by public opinion (mobilized against public sector competition with private telecommunications providers).

Aside from statutory limitations on cash arrangements, one of the strongest arguments in favor of in-kind compensation is timing. Barter arrangements may be more easily effected in a short time and, when the window of opportunity is limited, speed can make the difference between a deal and no deal.

5.4.3 Geographic Scope

Shared resource projects can be state-wide in geographic scope or limited to a single highway segment or municipality. Choice of project scope is a function of public sector needs, administrative preferences, and private partner focus. In turn, geographic definition can affect private partner response and, as well, the kind and magnitude of compensation received by the public sector. The impact of geographic scope on bidder response can be conditioned by the public sector's decisions on exclusivity.

In essence, there are three basic geographic formats plus a hybrid (fourth) format:

- Extensive single project—all (or most) segments and corridors in the public sector telecommunications plan are included in a single project;
- Several smaller projects, addressed independently—the state-wide plan is disaggregated into a series of regional projects, negotiated separately;
- Bidder-defined projects—the public sector invites bidders to define project scope in terms of rights-of-way segments that interest them; and
- Bidder-constructed packages aggregated from individual public sector-defined projects—a hybrid of the second and third approaches allowing bidders some flexibility in selecting geographic regions but precluding any "cherry picking" of specific road segments within each project area.

The disadvantage of projects that are extensive in scope is that they may discourage small bidders and firms interested only in limited areas. If private partners are willing to

undertake such projects, however, the public sector is assured of sufficient geographic coverage (though breadth may be at the expense of depth in equipment support).

On the other hand, a series of smaller projects or bidder-defined projects encourages different (and maybe more) bidders. But, if potential private sector partners are interested in only some of the projects or right-of-way segments, the public sector may have gaps in its telecommunications backbone that will have to be filled in at public expense. Moreover, long distance telecommunications providers may be discouraged from bidding on any projects unless they can be assured of access within a reasonable time period to contiguous right-of-way segments, which are distributed among different projects. If individual projects are awarded on an exclusive basis, one project at a time, long distance carriers run an even greater risk of ending up with gaps in the system they want unless they are prepared to outbid all competition for critical right-of-way links.

The hybrid format, which imposes some constraints on "cherry picking," could impose an excessive planning and institutional ourden on the public sector because all projects would have to be ready to go to bid at the same time.

At base, decisions on project scope are conditioned by administrative considerations and the type and strength of market demand for highway rights-of-way—that is, private sector willingness to undertake extra financial or barter obligations in order to gain access to rights-of-way that are integral to their business development.